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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,930	08/02/2001	Hiroki Kanai	NITT.0020	4634

7590 01/08/2004

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EXAMINER

CHEUNG, MARY DA ZHI WANG

ART UNIT	PAPER NUMBER
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3621

DATE MAILED: 01/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/919,930

Applicant(s)

KANAI ET AL.

Examiner

Mary Cheung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**Notice of References Cited**

Application/Control No.

09/919,930

Applicant(s)/Patent Under  
Reexamination  
KANAI ET AL.

Examiner

Mary Cheung

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**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-5,131,087	07-1992	Warr, Roger F.	711/113
	B	US-5,276,867	01-1994	Kenley et al.	707/204
	C	US-5,410,598	04-1995	Shear, Victor H.	705/53
	D	US-5,940,838	08-1999	Schmuck et al.	707/200
	E	US-5,946,660	08-1999	McCarty et al.	705/5
	F	US-6,263,350	07-2001	Wollrath et al.	707/206
	G	US-6,370,580	04-2002	Kriegsman, Mark E.	709/226
	H	US-6,427,152	07-2002	Mummert et al.	707/102
	I	US-6,516,348	02-2003	MacFarlane et al.	709/224
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N	JP 03280652 A	12-1991	Japan	AKIYAMA et al.	H04M 17/00
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 1-3 and 5 are objected to because of the following informalities:

- a) In line 3 of claim 1, the phrase "said storage user" should be "said rental storage user";
- b) In line 4 of claim 1, the phrase "the rental storage service" should be "rental storage service";
- c) In line 6 of claim 1, the phrase "the rental storage service provider" should be "the storage provider";
- d) In lines 6-7 of claim 1, the phrase "the estimation" should be "estimation";
- e) In lines 1-2 of claim 2, the phrase "a rental storage user" should be "a rental storage service user";
- f) In lines 2-3 of claim 2, the phrase "a storage service provider" should be "a rental storage service provider";
- g) In line 3 of claim 2; the phrase "said storage user" should be "said rental storage service user";
- h) In lines 3-4 of claim 2, the phrase "said storage provider" should be "said rental storage service provider";
- i) In lines 4-5 of claim 2, the phrase "the rental storage service" should be "rental storage service";
- j) In line 8 of claim 2, the phrase "the contract options" should be "contract options";

- k) In line 10 of claim 2, the phrase "the storage" should be "storage";
- l) In line 12 of claim 2, the phrase "the charge" should be "charge";
- m) In lines 16-17 of claim 2, the phrase "the estimated" should be "an estimated";
- n) In lines 1-2 of claim 3, the phrase "a rental storage user" should be "a rental storage service user";
- o) In lines 2-3 of claim 3, the phrase "a storage service provider" should be "a rental storage service provider";
- p) In line 3 of claim 3, the phrase "said storage user" should be "said rental storage service user";
- q) In lines 3-4 of claim 3, the phrase "said storage provider" should be "said rental storage service provider";
- r) In lines 4-5 of claim 3, the phrase "the rental storage service" should be "rental storage service";
- s) In line 9 of claim 3, the phrase "the contracted amount" should be "a contracted amount";
- t) In lines 9-10 of claim 3, the phrase "the predetermined usage" should be "predetermined usage";
- u) In lines 11-12 of claim 3, the phrase "the storage usage" should be "storage usage";
- v) In line 15 of claim 3, the phrase "the amount" should be "an amount";

w) In line 4 of claim 5, the phrase "the desirable amount" should be "an desirable amount".

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 6, it is not clear how the step of "prior to the step of reconfiguring said contract options" related to other steps described in the claim. Furthermore, this limitation does not perform anything. For examination purpose, this limitation is not considered.

***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1 and 3-5 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts. In the present case, claims 1 and 3-5 only recite abstract ideas. The recited steps of merely providing a storage rental contract between a rental storage service provider and a rental storage service user, estimating future storage usage of the user, and proposing a recommended storage usage contract to the user. These steps do not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. These steps only constitute an idea of how to optimize the storage usages over other methods.

As to technological arts recited in the preamble, mere recitation in the preamble (i.e., intended or field of use) or mere implication of employing a machine or article of manufacture to perform some of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble. In the present case, none of the recited steps in claims 1 and 3-5 are directed to anything in the technological arts as explained above with the exception of the recitation in the preamble that the method is using "a network". Looking at the claim as a whole, nothing the body of the claim

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recites any structure or functionality to suggest that the recited steps are performed by using the network. Therefore, the preamble is taken to merely recite a field of use.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. In the present case, claims 1 and 3-5 produce estimation of future storage usage and proposing a recommended storage usage contract (i.e., useful and tangible).

Although the recited process produces a useful, concrete, and tangible result, since the claimed invention, as a whole, is not within the technological arts as explained above, claim 1 is deemed to be directed to non-statutory subject matter. Applicant is advised to include a positive recitation by using advance technologies, such as the recitation in claim 2 that "using the storage of said rental storage service provider by the rental storage service user".

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not



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commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over anticipated by Wollrath et al., U. S. Patent 6,263,350 in view of Mummert et al., U. S. Patent 6,427,152.

As to claim 1, Wollrath teaches a service method of a rental storage, in which a rental storage user (*"the client"*) uses the rental storage provided by a storage provider (*"the server"*) on a network and said storage user and said storage provider communicate with respect to the rental storage service (title and column 12 lines 38-48).

Wollrath does not specifically teach the service method of a rental storage comprising the steps of: providing by the rental storage service provider the estimation of future storage usage of said rental storage service user, based on the history of storage usage of said rental storage service user. However, this matter is taught by Mummert as providing the storage provider system the estimation of future storage usage based on the history of the storage usage (column 4 lines 6-21 and column 5 line 1 – column 6 line 4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the service method of Wollrath to include the feature of providing the rental storage service provider the estimation of future storage usage based on the history of the storage usage as taught by Mummert because this would accurately project the future utilization of the storage for preventing service

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outages caused by storage filled to capacity as stated by Mummert (column 2 lines 6-11 and column 4 lines 17-21).

Wollrath modified by Mummert as discussed above further teaches the storage user request rental of the storage comprising various parameters (Wollrath: column 12 line 43-45, 65-67). Wollrath modified by Mummert does not explicitly teach reporting the estimation to said storage user. It would have been obvious to one of ordinary skill in the art to allow the estimation in the teaching of Wollrath modified by Mummert to be reported to the storage user because this would allow the user to better determine the parameters for requesting the rental storage.

9. Claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over anticipated by Wollrath et al., U. S. Patent 6,263,350 in view of Mummert et al., U. S. Patent 6,427,152 in further view of Shear, U. S. Patent 5,410,598.

As to claim 2, Wollrath teaches a service method of a rental storage, in which a rental storage user (*"the client"*) uses the rental storage provided by a storage service provider (*"the server"*) on a network and said storage user and said storage provider communicate with respect to the rental storage service, comprising the steps of (title and column 12 lines 38-48):

- a) making a contract between said rental storage service provider and said rental storage service user so as to configure the contract options based on the contract of use of storage service (column 12 line 38 – column 14 line 8; *specifically, in column 12 lines 44-45 the server grants a lease to the client*

*corresponding "a contract", in column 12 lines 45-52 the entire lease period and the portion of the lease period corresponding to "the contract options";*

b) using the storage of said rental storage service provider by the rental storage service user (column 12 lines 53-59);

c) reconfiguring said contract options by said rental storage service provider (column 13 lines 26 – column 14 line 8; *specifically, "reconfiguring said contract options" corresponding to renew the lease, cancel the lease, reject the lease, etc. in Wollrath's teaching*).

Wollrath does not specifically teach reporting the history of storage usage record and the estimated amount of data to the rental storage service user from the rental storage service provider. Mummert teaches reporting the storage service provider system the history of storage usage record and the estimated amount of data for future storage usage based on the history of the storage usage (column 4 lines 6-21 and column 5 line 1 – column 6 line 4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the service method of Wollrath to include the feature of reporting the history of storage usage record and the estimated amount of data as taught by Mummert because this would accurately project the future utilization of the storage for preventing service outages caused by storage filled to capacity as stated by Mummert (column 2 lines 6-11 and column 4 lines 17-21).

Wollrath modified by Mummert as discussed above further teaches the storage user request rental of the storage comprising various parameters (Wollrath: column 12 line 43-45, 65-67). Wollrath modified by Mummert does not explicitly teach reporting

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the history of storage usage record and the estimated amount of data to said storage user from the rental storage service provider. It would have been obvious to one of ordinary skill in the art to allow the history of storage usage record and the estimated amount of data in the teaching of Wollrath modified by Mummert to be reported to the storage user from the rental storage service provider because this would allow the user to better determine the parameters for requesting the rental storage.

Wollrath modified by Mummert does not specifically teach reporting the charge to the rental storage service user by the rental storage service provider, and paying the charge for the use of said storage by the rental storage service user to the rental storage service provider. However, Shear teaches reporting the charge to the user by the service provider, and paying the charge for the usages used by said user to said service provider (abstract and column 15 lines 46-60 and column 16 lines 41-53 and column 22 lines 41-43). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the service method of Wollrath modified by Mummert to include the feature of reporting the charge to the rental storage service user by the service provider, and paying the charge for the usages used by said user to the service provider because this would allow the rental storage service provider to efficiently collect the royalties for the services have been provided to the users.

As to claim 3, Wollrath teaches a service method of a rental storage, in which a rental storage user (*"the client"*) uses the rental storage provided by a storage service provider (*"the server"*) on a network and said storage user and said storage provider communicate with respect to the rental storage service, comprising the steps of: when

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said rental storage service provider and said rental storage service user make a contract and the contract options based on the contract of use of said storage specifies the contract amount of data (column 12 line 38 – column 14 line 8; *specifically, in column 12 lines 44-45 the server grants a lease to the client corresponding “a contract”, in column 12 lines 45-52 the entire lease period and the portion of the lease period corresponding to “the contract options”, in column 12 lines 45-48 and column 12 line 65 – column 12 line 25 the leasing period and the access parameters corresponding to “the contract amount”*).

Wollrath does not specifically teach estimating by said rental storage service provider the storage usage in the future based on the history of storage usage by said rental storage service user. However, Mummert teaches estimating by the storage service provider the future storage usage based on the history of the storage usage (column 4 lines 6-21 and column 5 line 1 – column 6 line 4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the service method of Wollrath to include the feature of estimating the future storage usage based on the history of the storage usage because this would accurately project the future utilization of the storage for preventing service outages caused by storage filled to capacity as stated by Mummert (column 2 lines 6-11 and column 4 lines 17-21).

Wollrath does not specifically teach proposing to said rental storage service user a recommended contract on the amount of data according to the estimation. The limitation of proposing the amount of data according to the estimation is taught by Mummert as projecting the storage capacity, and defining actions to prevent the

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utilizations of reaching the storage capacity (column 3 lines 36-53). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the rental storage service method in the teaching of Wollrath modified by Mummert as discussed above to include the feature of projecting the storage capacity and defining the actions to prevent the utilization of reaching the storage capacity as taught by Mummert because this would allow the rental storage service provider to better predict the future capacity of the storage and to better ensure the availabilities of the storage to the users. Wollrath modified by Mummert does not specifically teach proposing to said storage service user a recommended contract on the amount of data according to the estimation. It would have been obvious to one of ordinary skill in the art to allow the feature of defining the actions to prevent the utilization of reaching the storage capacity in the teaching of Wollrath modified by Mummert to further include the feature of proposing to the storage user a recommended contract on the amount of data according to the estimation because this would allow the storage user to better determine the leasing parameters before requesting the lease from the rental storage service provider, this would also better ensure the rental storage service provider to provide the sufficient storage memory during the granted lease period.

Wollrath modified by Mummert does not specifically teach the contract and the contract options based on the contract of use of said storage specifies a charge system for the contracted amount of data according to the predetermined usage. However, Shear teaches a charge system that charging the users according to the predetermined usage (column 16 lines 41-45; *specifically, charging the users according to the*

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*predetermined usage corresponding to charging the user an annual fee or a flat fee for unlimited usage*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the contract and the contract options in the teaching of Wollrath modified by Mummert to include the feature of specifying a charge system to charge the users according to the predetermined usage because this would allow the service provider to ensure its royalties for the services that will be provided to the users according to the contract.

As to claim 4, Wollrath modified by Mummert and Shear as discussed above does not explicitly teach proposing reduction of amount of data contracted for the storage usage if the storage usage estimated is less than the currently contracted storage usage. However, Wollrath teaches the rental storage service provider and the storage user to negotiate the storage lease (column 19 lines 51-54), and Mummert teaches a threshold is an artificial limit that used for the storage capacity planning (column 3 lines 36-53). It would have been obvious to one of ordinary skill in the art to allow the teaching of Wollrath modified by Mummert and Shear to include the feature of proposing reduction of amount of data contracted for the storage usage if the storage usage estimated is less than the currently contracted storage usage because this would allow the rental storage service provider to better optimize the storage capacity planning.

As to claim 5, Wollrath modified by Mummert and Shear as discussed above further teaches when said rental storage service user updates said contract options in accordance with the desirable amount of data usage of storage recommended by said

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rental storage service provider, if the amount of data usage by said rental storage service user exceeds the contracted amount of data for storage usage reconfigured within the contract period of the contract, said rental storage service user will be allowed using the storage service for the data beyond the contracted amount of said storage usage (see claim 3 above; Wollrath: column 13 lines 50-56 and column 15 lines 60-63; *specifically, the user exceeds the contracted amount corresponding to the insufficiency of the original lease in Mummert's teaching*).

As to claim 6, Wollrath modified by Mummert and Shear as discussed above does not explicitly teach proposing by said rental storage service provider a reduction plan of data used by said rental storage service user, and reducing the data used by said rental storage service user in accordance with the recommended reduction plan of data. However, Wollrath teaches the rental storage service provider and the storage user to negotiate the storage lease (column 19 lines 51-54), and Mummert teaches a threshold is an artificial limit that used for the storage capacity planning (column 3 lines 36-53). It would have been obvious to one of ordinary skill in the art to allow the teaching of Wollrath modified by Mummert and Shear to include the feature of proposing by the rental storage service provider a reduction plan of data used by the storage user, and reduce the data used by storage user in according with the recommended reduction plan this would allow the rental storage service provider to better optimize the storage capacity planning.

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over anticipated by Wollrath et al., U. S. Patent 6,263,350 in view of Mummert et al., U. S. Patent



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6,427,152 and Shear, U. S. Patent 5,410,598 in further view of Kenley et al., U. S. Patent 5,276,867.

As to claim 7, Wollrath modified by Mummert and Shear teaches reducing the data used by the rental storage service user in accordance with the recommended reduction plan as discussed in claim 6 above. Wollrath modified by Mummert and Shear does not specifically teach when said rental storage service user deletes data in use in accordance with the recommended reduction plan of data, said rental storage service provider duplicates on a portable medium a backup copy of the data specified to delete by said rental storage service user, and said rental storage service provider sends the backup copy of data to the rental storage service user. However, Kenley teaches migrating the selected data from data storage to a backup storage when the quantity of data stored in the data storage exceed the threshold, providing the user the backup copy of the migrated data (column 2 lines 56-68 and column 3 lines 32-47 and column 5 lines 40-41; *specifically, in column 3 lines 40-42 the optical disk backup storage corresponding the portable medium for storing a backup copy as claimed*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the recommended reduction plan in the teaching of Wollrath modified by Mummert and Shear to include the feature of migrating the selected data in accordance with the recommended reduction plan from the rental storage to a backup storage, and providing the storage user the backup copy of the migrated data because this would allow the rental storage service provider to better optimize the storage capacity planning.

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Warr (U. S. Patent 5,131,087) discloses automatically redistributing data records stored in a storage device.

Schmuck et al. (U. S. Patent 5,940,838) discloses a shared disk file system running on multiple computers each having their own instance of an operating system and being coupled for parallel data sharing access to files residing on network attached shared disks.

McCarty et al. (U. S. Patent 5,946,660) discloses an automated storage system comprising a plurality of self-storage, facilities which are collectively networked to a central command center.

Kriegsman (U. S. Patent 6,370,580) discloses web serving system coordinating multiple servers to optimize file transfers.

MacFarlane et al. (U. S. Patent 6,516,348) discloses collecting and predicting capacity information for composite network resource.

Akiyama et al. (JP 03280652 A) discloses leasing mobile terminal equipment.

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***Inquire***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Cheung whose telephone number is (703)-305-0084. The examiner can normally be reached on Monday – Thursday from 8:00 AM to 5:30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell, can be reached on (703) 305-9768.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

The fax phone number for the organization where this application or proceedings is assigned are as follows:

(703) 872-9306 (Official Communications; including After Final

Communications labeled "BOX AF")

(703) 746-5619 (Draft Communications)

Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, 7<sup>th</sup> Floor Receptionist.

Mary Cheung  
Patent Examiner  
Art Unit 3621  
December 18, 2003

